65745 – 7.8 grams 65746 – 4.2 grams 65747 – 0.8 grams 65748 – 1 gram 65749 – 1 gram 65755 – 1.4 grams 65756 – 0.8 grams Soil Breccia



Figure 1: Photo of 65745. Scale is in cm/mm. S72-47692

Introduction

This collection of small brown soil breccias was studied by Joy et al. (2011). They have high maturity as measured by magnetic Is/FeO (table 1) – see section on 65701. They have a seriate grain size distribution, with glass in the matrix.

Petrography

Warner et al. (1976) simply say that 65745, 65746 are similar to 60535. They include glass fragments, finegrained breccias clasts, plagioclase clasts, lithic clasts and glassy matrix. 65755 has several large white clasts.

Table 1:	Maturity Is/FeO
65745	27
65746	85
65747	42
65748	39
65749	65
65755	81



Figure 2: Photo of 65746. Scale marks are exactly 1 mm apart! S72-47691.

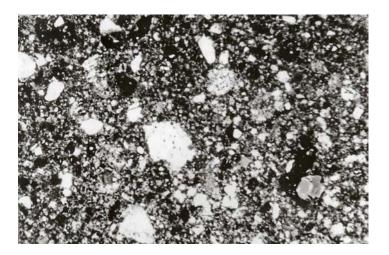
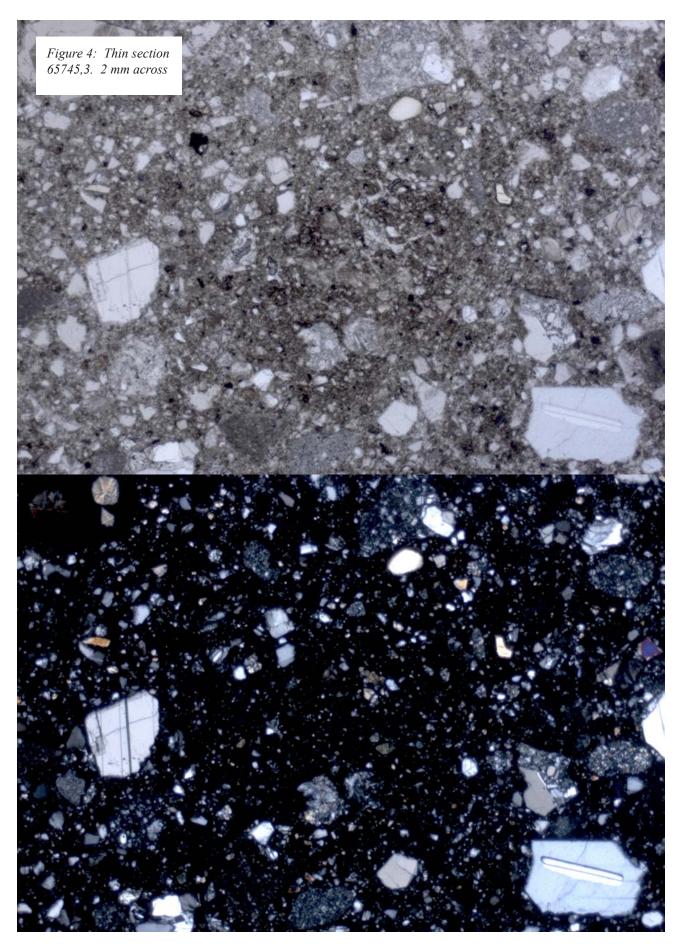


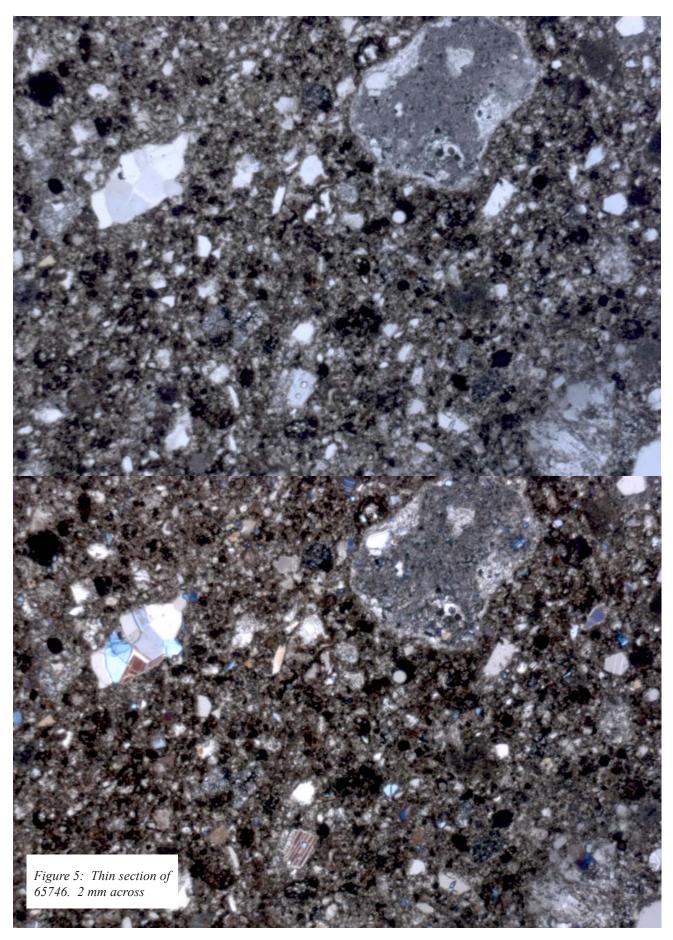
Figure 3: Thin section photograph of 67546.

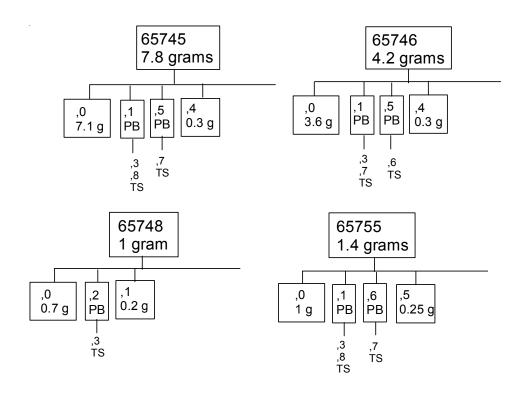
Processing

For some unknown reason there are several thin sections of these particles.



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References for 65745 - 65755

Butler P. (1972a) Lunar Sample Information Catalog Apollo 16. Lunar Receiving Laboratory. MSC 03210 Curator's Catalog. pp. 370.

Joy K.H., Kring D.A., Bogard D.D., McKay D.S. and Zolensky M.E. (2012) Re-examination of the formation ages of the Apollo 16 regolith breccias. *Geochem. Cosmochim. Acta* doi: 10.1016

Keil K., Dowty E., Prinz M. and Bunch T.E. (1972) Description, classification and inventory of 151 Apollo 16 rake samples from the LM area and station 5. Curator's Catalog, JSC.

LSPET (1973b) The Apollo 16 lunar samples: Petrographic and chemical description. *Science* **179**, 23-34.

LSPET (1972c) Preliminary examination of lunar samples. *In* Apollo 16 Preliminary Science Report. NASA SP-315, 7-1—7-58.

Ryder G. and Norman M.D. (1980) Catalog of Apollo 16 rocks (3 vol.). Curator's Office pub. #52, JSC #16904

Shearer C.K., Papike J.J., Galbreath K.C., Wentworth S.J. and Shimizu N. (1990b) A SIMS study of lunar "komatiitic glasses". Trace element characteristics and possible origin. *Geochim. Cosmochim. Acta* **54**, 1851-1857.

Sutton R.L. (1981) Documentation of Apollo 16 samples. In Geology of the Apollo 16 area, central lunar highlands. (Ulrich et al.) U.S.G.S. Prof. Paper 1048.

Warner R.D., Dowty E., Prinz M., Conrad G.H., Nehru C.E. and Keil K. (1976c) Catalog of Apollo 16 rake samples from the LM area and station 5. Spec. Publ. #13, UNM Institute of Meteoritics, Albuquerque. 87 pp.

Wentworth S.J. and McKay D.S. (1984) Density and porosity calculations for Apollo 15 and 16 regolith breccias (abs). *Lunar Planet Sci.* **XV**, 906-907. Lunar Planetary Institute, Houston.

Wentworth S.J. and McKay D.S. (1988) Glasses in ancient and young Apollo 16 regolith breccias: Populations and ultra-Mg glass. *Proc.* 18th Lunar Planet. Sci. Conf. 67-77. Lunar Planetary Institute, Houston.